

Background: Congenital extrahepatic portosystemic shunt - the Abernethy malformation - is a rare anomaly. We present a 26 year old male with right upper quadrant pain also found to have an absent portal vein, double gallbladder, double spleen, right-sided pancreas and malrotation of the gut.

Method: A search was made on Pubmed for literature on Abernethy malformation and these were examined for associated abnormalities similar to those found in our patient.

Results: Abernethy malformation is extremely rare. Type I describes a complete absence of the portal vein as in our patient but is more common in females. It is also associated with other abnormalities including polysplenia, cardiac anomalies as well as malrotation. Type II is commoner in males, describing a partial shunt and rarely associated with other malformations. Hepatic neoplasms are a common finding in patients with CEPS. No case with associated double gall bladder was described.

After routine imaging, no definite cause for the patient's abdominal pain was found. However, several liver lesions were noted and are currently being investigated.

Conclusion: A very rare case of Abernethy malformation with associated polysplenia, malrotation and we report, to our knowledge, the first instance of an associated double gallbladder.

1089 WINNER OF IJS CASE REPORTS PRIZE (JOINT 1ST PLACE): A TRANS-RECTAL, RETROPERITONEAL PARA-AORTIC LYMPH NODE DISSECTION USING NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY (NOTES) IN A PORCINE MODEL

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Background: Retroperitoneal lymph node dissection is employed in high-risk clinical stage 1 nonseminomatous germ-cell tumours to detect metastases. Current methods include open and laparoscopic approaches. Transvaginal NOTES para-aortic lymphadenectomy for gynaecological malignancy has been described. We present a novel trans-rectal approach.

Methods: Under ethical approval and home office license, a para-aortic lymphadenectomy was performed in an anaesthetised 55kg pig in the supine position. A rectal port was placed and the retroperitoneum was accessed through a 2inch incision in the posterior rectal wall using a flexible endoscope. The retroperitoneal space was opened using blunt dissection and CO₂ insufflation. The right kidney, right renal vein and inferior vena cava were easily identified. A para-aortic lymph node was removed using conventional flexible endoscopic instruments.

Results: A para-aortic lymph node was successfully excised and the histology was confirmed microscopically. Operating time was 27mins without injury to other structures encountered. Subjectively, access was straightforward and the retroperitoneal structures clearly visualised. The animal was euthanized at the end as per the experimental protocol.

Conclusion: It is feasible to obtain para-aortic lymph nodes using a trans-rectal, retroperitoneal NOTES approach in the porcine model. This approach could provide an alternative diagnostic option for patients with suspected retroperitoneal pathology.

COLOPROCTOLOGY

0019: MEASURING THE QUALITY OF COLONOSCOPY AT A DISTRICT GENERAL HOSPITAL IN SOUTH EAST ENGLAND: ADENOMA DETECTION RATES AND WITHDRAWAL TIMES

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Aims: The aim of our audit was to ascertain the adenoma detection rate and withdrawal time in a district general hospital, to allow comparison with the national NHS guidelines and improve service development.

Methods: Data was collected over a 5 month period commencing in June 2011. Data was excluded if the colonoscopy was part of surveillance or was a repeat colonoscopy. Correlation was made with subsequent histological findings.

Results: Data was collected for 134 patients that met the eligibility criteria. The mean age of those undergoing colonoscopy was 71 years, (age range 49–88 years) The male to female ratio was 75:59. The majority of colonoscopies were performed by consultants 59%, with the remaining being

performed by specialist nurses 17% and registrars 9%. The adenoma detection rate in our sample was 28%. The mean extubation time was 8 minutes. The adenoma detection rates were statistically higher for specialist nurses than both consultants and registrars ($p < 0.005$).

Conclusions: Adenoma detection rates are important quality control markers for colonoscopy centres. In our sample, although the extubation times were in accordance with national guidelines, our adenoma detection rate was lower than expected. Our results also provide further evidence in support of specialist nurse endoscopists.

0032: A META-ANALYSIS EXPLORING THE ROLE OF FLAVONOIDS AFTER HAEMORRHOIDECTOMIES

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Aims: A meta-analysis of published literature examining the role of flavonoids in the post-haemorrhoidectomy period.

Methods: Electronic databases were searched from January 1985 to October 2011. A meta-analysis was performed to obtain a summative outcome.

Results: Eight studies involving 695 patients were analyzed. 347 patients were in the flavonoid group and 348 in the placebo group. There was no significant difference in pain at day 1 [random effects model: SMD = -1.07, 95% CI (-2.45, 0.32), $z = 1.51$, $p = 0.13$]. Pain was less after flavonoids on day 2 [random effects model: SMD = -1.17, 95% CI (-2.10, -0.23), $z = 2.45$, $p = 0.01$] and approached significance on day 3 [random effects model: SMD = -1.90, 95% CI (-3.84, 0.05), $z = 1.91$, $p = 0.06$]. Pruritis symptoms were less in the flavonoid group up to 10 days after the operation [random effects model: SMD = -1.98, 95% CI (-3.81, -0.16), $z = 2.13$, $p = 0.03$]. There was some slight reduction in bleeding after flavonoids up to 10 days post-operatively [fixed effects model: SMD = -1.01, 95% CI (-1.46, -0.57), $z = 4.49$, $p = 0.00001$]. There was conflicting data on hospital stay.

Conclusions: Flavanoids after haemorrhoidectomy may reduce pain, symptoms of pruritis and minor bleeding in the early post-operative period. Further randomized controlled trials especially after newer techniques for treating haemorrhoids.

0043: PREDICTING A PERFORATION IN ACUTE APPENDICITIS - THE USE OF TOTAL BILIRUBIN LEVELS, CRP, WHITE CELL COUNT AND NEUTROPHILS

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Aims: Identifying a perforated appendix early could reduce the impact this has on the patient. Bilirubin, CRP and white cell count have been shown to indicate perforation in acute appendicitis.

Methods: A retrospective cohort study of appendicectomies investigating pre-operative bilirubin, C-reactive protein (CRP), White cell count (WCC), and neutrophil count and correlating these results with the histological investigation of perforation.

Results: 1271 patients were found to have appendicitis, 154 (12.12%) of which had a perforation. All biochemical markers were significantly raised in perforation ($p < 0.001$). The sensitivity and specificity of a raised CRP (94.4% and 31.8%) and bilirubin (62.5% and 88.3%) were improved when results were combined as CRP > 5 mg/L and bilirubin > 21 μ mol/L - sensitivity = 60.5%, specificity = 91.6%. Sensitivity and specificity were reduced by incorporating WCC and neutrophils. Logistic regression analysis identified CRP as the most sensitive marker of perforation (OR = 1.064 (1.043–1.085)) ($p < 0.001$), with bilirubin (OR = 1.005 (1.003–1.008)) also significant ($p < 0.001$).

Conclusions: Bilirubin and CRP are markers of perforation in appendicitis but are not accurate enough to be used diagnostically. In a patient with high clinical suspicion of acute appendicitis, raised CRP and bilirubin as tests are specific for a perforation, but are not sensitive.

0047: COLONOSCOPIC TATTOOING OF COLORECTAL NEOPLASIA - A CHANGE IN PRACTICE

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Background: In concordance with the national guidelines, the St. Mark's Hospital colonoscopic tattooing protocol stated that suspicious lesions should be tattooed, with the exception of those in the caecum and within 20 cm of the anal verge. Three tattoos should be placed (120° apart, close to the lesion) and distal to lesions proximal to the splenic flexure (SpFlx). Left sided lesions should have tattoos placed proximal to the lesion.

Aims: To audit compliance with the tattooing protocol in patients undergoing surgery for colorectal neoplasia.

Methods: We reviewed endoscopy reports for the location of tattoos relative to the lesion and number of tattoos placed in all patients who had surgery over 12 months.

Results: 114 reports were available and full compliance with the protocol was observed in 71 cases (62%). 19 cases (17%) were partially compliant and 24 cases (21%) were non-compliant. Incomplete documentation (22 cases) and inability to place tattoos proximal to obstructing lesions (19 cases) were the major causes of reduced compliance.

Conclusions: Educational intervention is necessary to address poor documentation. However, changes to our protocol are also required. The new protocol recommends that all tattoos should be placed distal to the lesion, regardless of the anatomical position.

0051: DOES RIGID SIGMOIDOSCOPY HAVE A PLACE IN THE MODERN OUTPATIENT COLORECTAL CLINIC?

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Background: Although flexible sigmoidoscopy is now used in most outpatient colorectal clinics, rigid sigmoidoscopy is still used in many other (OP) colorectal clinics. The aim of our study is to assess the efficacy of rigid sigmoidoscopy.

Methods: Retrospective review of 103 patients that attended OP Colorectal clinic who had undergone rigid sigmoidoscopy for colorectal symptoms. Findings as well as requirement of further investigation were recorded.

Results: 103 patients. Presenting symptoms were; change in bowel habit 47 (45.6%), PR bleeding 33 (32%), rectal mass 8 (7.8%), Abdominal pain 4 (3.9%), faecal incontinence 1 (0.9%), tenesmus 1 (0.9%), anaemia 1 (0.9%) and follow up patients 8 (7.8%). Finding were; normal mucosa 62 (60.1%), inflamed mucosa 5 (4.9%), rectal polyp 2 (1.9%) and uninformative 34 (33.1%). Of the 103 patients, 68 (66%) required further investigations. 35 (34%) did not require further investigation. Amongst those who had a normal finding, on further investigation 16 (25%) had different pathologies. 3 (42%) out of 7 patients whom had abnormal finding on rigid sigmoidoscopy, no abnormality was detected on further investigation.

Conclusions: Our study showed that rigid sigmoidoscopy was rarely useful in the OP clinic set up. Further investigations were almost always needed to complete the assessment of the patient.

0097: LYMPH NODE HARVEST IN COLORECTAL RESECTIONS: AN AUDIT AT A SOUTH-EAST ENGLAND COLORECTAL SURGERY UNIT COMPARING PERFORMANCE IN 2005 AND 2008 WITH ANALYSIS OF THE INFLUENCE OF KEY OPERATIVE FACTORS

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Lymph node examination is vital in the staging of colorectal cancer and ultimately influencing decisions on post-operative management. The 'Association of Coloproctology of Great Britain and Ireland' as well as the 'National Institute of Clinical Excellence' recommend that at least 12 lymph nodes are examined per resection.

Aim: This study assesses the performance of a large colorectal surgery unit in England against the above targets between 2005 and 2008 with an analysis of the influence of operator and patient variables.

Method: A hospital database search was used to identify all patients who underwent colorectal cancer resections in the months of October in 2005 (n=51) and 2008 (n=69). Information was extracted manually from notes and computed.

Results: A significant improvement was shown in lymph node clearance from 8.2 to 11.0 between 2005 and 2008 respectively (p=0.0019). No statistically significant difference between elective/emergency or open/laparoscopic resections was shown. The strongest improvement was found in open resections between 2005 & 2008 cohorts.

Conclusion: The results of the study provide further cause to explore and discuss the reasons behind the apparent improvement in lymph node harvest and to determine the relative importance of surgical technique, histopathological techniques and other possible influential factors.

0115: COLORECTAL RESECTIONS: EVALUATING SHORT TERM POSTOPERATIVE OUTCOMES IN LAPAROSCOPIC VERSUS OPEN SURGERY

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Introduction: Laparoscopic colectomies has become increasingly popular in the recent decade, however reluctance still exists to widely apply it for colorectal resections. This study aims to evaluate the postoperative outcomes of laparoscopic surgery (LS) compared to open surgery (OS) in our centre.

Method: All patients who underwent colorectal resection from June 2010 to February 2011 were reviewed retrospectively from the hospital database. Parameters include length of postoperative stay, infective and non-infective complications.

Result: Between June 2010 and February 2011, a total of 99 patients of median age 69 (range 20-95) underwent colorectal resection. The most common indication was malignancy (66%). 56/99 cases were subjected to LS, and 43/99 to OS, with a number of 5 conversions.

Median postoperative stay was 13 days. This was higher in OS (10) compared to LS (7).

45 positive cultures occurred in 31 patients. OS has a significantly higher (p=0.01) incidence of infection - 20/43 (46.5%) patients compared to LS - 11/56 (19.6%).

Total non-infective complications was 29 (29.3%). This difference was not significant between OS (14, 48.3%) and LS (15, 51.7%).

Conclusion: LS demonstrated better postoperative outcomes compared to OS. As a result of this study, further reviews were conducted within the General Surgery department to explore the possibility of increasing usage of the laparoscopic method.

0118: THE ROLE OF FDG-PET CT IN COLORECTAL CANCER

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Background: There is limited evidence to support the use of PET-CT in colorectal cancer. The aim of this study is to evaluate the clinical impact of PET scan in management of our patients.

Methods: 1043 patients were identified from SCAN database over a 2 year period, from July 2009. 103 patients underwent a FGD-PET CT in addition to conventional imaging. In this retrospective study, PET CT findings were compared with CT findings and the clinical impact was evaluated.

Results: 27 patients (26.2%) had PET CT for pre-operative staging and 76 patients (73.7%) for disease surveillance. Based on PET findings, the management was altered in 21 (77.7%) patients in pre-operative group with indeterminate CT findings. In the follow-up group, PET had a significant impact on management of 51 patients (67.1%), of which 39 had indeterminate CT findings. 6 patients with a negative CT had recurrent disease and another 6 patients with resectable disease on CT had unresectable metastases on PET.

On the basis of PET CT, surgery was avoided in 32 cases (31%) and 32 patients (31%) were offered curative resection.

Conclusion: PET CT plays a significant role in management of colorectal cancer by avoiding unnecessary surgery or identifying recurrent disease at an early stage.

0161: AUDIT OF CT COLONOGRAPHY: DOES IT ANSWER OUR QUESTIONS?

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Aim: CT Colonography (CTC) is being increasingly used instead of colonoscopy as it is less invasive and detects extra-colonic abnormalities. It has 94.9% sensitivity and 99.7% negative predictive value for colorectal cancer. As it is frequently used in our hospital, we aim to assess - appropriateness of requests; bowel preparation adequacy; effectiveness in identifying abnormalities; diagnostic value and possible use as a screening tool and/or gold standard investigation.